Claims 16-19 and 23 were rejected under 35 U.S.C. 103 over Gu et al. (Cell article).

Claims 20 and 22 were rejected under 35 U.S.C. 103 over Lill et al. (Nature article) or Gu (Cell article) in view of Poethke et al. (J. Immun. Article).

For the sake of brevity, the three rejections are addressed in combination. Each of the rejections is traversed.

Applicants disclose and claim a method for screening a compound that inhibits or enhances activity of an acetyltransferase to catalyze a reaction that transfer an acetyl group from one substrate to another, the method comprising:

(a) contacting the acetyltransferase with a peptide substrate in a presence of a test compound,

(b) detecting an amount of an acetylated peptide substrate using an anti-acetylated peptide antibody, wherein the anti-acetylated peptide antibody recognizes only an acetylated form of the peptide substrate and does not recognize the peptide substrate in its unacetylated form,

(c) comparing the amount of the acetylated peptide substrate detected in step (b) with a control amount defined as an amount of an aceylated peptide substrate detected in an absence of the test compound, and

(d) selecting the compound associated with an increase or decrease in the amount of the acetylated peptide substrate as compared to the control amount.

The usefulness of these claimed methods is specifically demonstrated in the examples of the application. See, for instance, pages 40 through 44 of the application.

None of the cited documents teach or suggest such methods as Applicants disclose and claim.

In the Office Action, it is specifically acknowledged that the primary citations of the Lill et al. and Gu et al. papers do not teach screening assays.

Respectfully, on that basis alone, the rejections should be withdrawn. See, for instance, Section 2143.03 of the Manual of Patent Examining Procedure, which states in part:

> To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art.

Indeed, Applicants' claimed methods include detecting an *acetylated peptide substrate* using an *anti-acetylated peptide substrate antibody* that recognizes an acetylated form of the peptide substrate and does not recognize the peptide substrate in its unacetylated form.

In distinction, the Lill document reports detection of a p53-p300/CBP complex -- **not** acetylated-p53 – using anti-p300/CBP antibodies (particularly GFP) – **not** anti-acetylated p53 antibodies. Lill also report antibodies pAb421 and pAb1801, which are reported for use to bind unmodified p53, **not** for detecting acetylated p53.

The Gu et al. document is similarly deficient. For instance, the Gu et al. document does not suggest a step of detecting an *acetylated peptide* substrate using an *anti-acetylated peptide substrate antibody* as Applicants disclose and claim.

In the Office Action, it is stated that Gu et al. reports use of anti-p53 antibodies.

Gu ret al. clearly does not disclose or otherwise suggest use of anti-acetylated antibodies for detection of acetylated peptide substrates as Applicants claim. Rather, Gu et al. merely reports the antibodies Pab421 and DO-1, which bind to **both** unmodified p53 as well as acetylated p53. See Gu et al. at page 599, right column and Figure 5A and 5D.

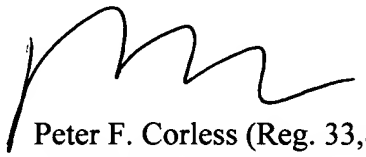
Such antibodies are distinguished from Applicants' claimed methods which call for an anti-acetylated peptide substrate antibody, which recognizes an acetylated form of the peptide substrate and does not significantly recognize the peptide substrate in unacetylated form.

The Poetke document does not cure the deficiencies of the primary citation. Poetke merely reports an ELISA system, and does not e.g. report or otherwise suggest detection of an acetylated peptide substrate using an anti-acetylated peptide substrate antibody.

In view thereof, reconsideration and withdrawal of the rejections are requested.

It is believed the application is in condition for immediate allowance, which action is earnestly solicited.

Respectfully submitted,



Peter F. Corless (Reg. 33,860)
EDWARDS & ANGELL, LLP
Dike, Bronstein, Roberts & Cushman IP Group
P.O. Box 9169
Boston, MA 02209
(617) 439-4444

MARKED VERSION TO SHOW CHANGES

16. (amended) A method for screening a compound that inhibits or enhance activity of an acetyltransferase to catalyze a reaction that transfer an acetyl group from one substrate to another, the method comprising:

(a) contacting the acetyltransferase with a peptide substrate in [the] a presence of a test compound,

(b) detecting an amount of an acetylated peptide substrate using an anti-acetylated peptide antibody, wherein the anti-acetylated peptide antibody recognizes only an acetylated form of the peptide substrate and does not recognize the peptide substrate in its unacetylated form,

(c) comparing the amount of the acetylated peptide substrate detected in step (b) with a control amount defined as an amount of an acetylated peptide substrate detected in [the] an absence of the test compound, and

(d) selecting the compound associated with an increase or decrease in the amount of the acetylated peptide substrate as compared to the control amount.

23. (amended) A kit for screening method of claim 23 [2], comprising an anti-acetylated antibody.